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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/751,421 | 12/29/2000 | Jin Li | 2069.010000 | 7845 |
| 23720 | 7590 | 10/19/2005 | EXAMINER | |
| WILLIAMS, MORGAN & AMERSON, P.C. 10333 RICHMOND, SUITE 1100 HOUSTON, TX 77042 | | | HAROLD, JEFFEREY F | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2646 | |

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/751,421

Applicant(s)

LI, JIN

Examiner

Jefferey F. Harold

Art Unit

2646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. ***Claims 1-20*** are rejected under 35 U.S.C. 102(e) as being anticipated by Caine et al. (United States Patent 6,735,302), hereinafter referenced as Caine.

Regarding **claim 1**, Caine discloses a method and apparatus for DC feed control. In addition, Caine discloses a method for DC level control for a line card, comprising: receiving a digital input signal; determining a first DC component value of the digital input signal at a first preselected time; determining a second DC component value of the digital input signal at a second preselected time; determining a difference between the first DC component value and the second DC component value; and providing the first DC component value to a digital-to-analog converter in response to determining that the difference is less than a first preselected value, as disclosed at column 2, lines 46-57; column 9, line 1 through column 11, line 19 and exhibited in figure 7.

Regarding **claim 2**, Caine discloses everything claimed as applied above (see claim 1), in addition Caine discloses subtracting the difference between the first DC component value and the second DC component value from the digital input signal, as

disclosed at column 2, lines 46-57; column 9, line 1 through column 11, line 19 and exhibited in figure 7.

Regarding **claim 3**, Caine discloses everything claimed as applied above (see claim 1), in addition Caine discloses providing the second DC component value to a digital-to-analog converter in response to determining that the difference is greater than the first preselected value, as disclosed at column 2, lines 46-57; column 9, line 1 through column 11, line 19 and exhibited in figure 7.

Regarding **claim 4**, Caine discloses everything claimed as applied above (see claim 1), in addition Caine discloses wherein determining the second DC component value of the digital input signal at a second preselected time includes determining a value proportional to the DC component of a signal on the subscriber, as disclosed column 2, lines 46-57; column 9, line 1 through column 11, line 19 and exhibited in figure 7.

Regarding **claim 5**, Caine discloses everything claimed as applied above (see claim 1), in addition Caine discloses wherein the digital input signal includes voice and data components, as disclosed at column 2, lines 46-57; column 9, line 1 through column 11, line 19 and exhibited in figure 7.

Regarding **claim 6**, Caine discloses everything claimed as applied above (see claim 1), in addition Caine discloses a line card including an analog-to-digital converter, wherein the first preselected value is in a range of $1/100^{\text{th}}$ to $1/10^{\text{th}}$ of full scale voltage of the analog-to-digital converter, as disclosed column 2, lines 46-57; column 9, line 1 through column 11, line 19 and exhibited in figure 7.

Regarding **claims 7-20**, they are variations of method claims 1-6, thus they are interpreted and thus rejected for the reasons set forth above in the rejection of claims 1-6.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Citation of Pertinent Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Betty et al., (United States Patent 6,922,470), discloses a hybrid dc-feed controller for a SLIC.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferey F. Harold whose telephone number is 571-272-7519. The examiner can normally be reached on Monday - Friday 9 am - 5:30 pm.

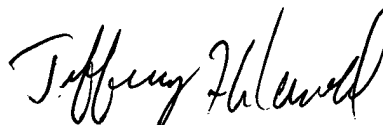
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2646

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JFH
October 12, 2005



Jefferey F Harold
Primary Examiner
Art Unit 2646